United Nations Trade and Development (UNCTAD)

# GLOBAL COMMODITIES FORUM
# 9-10 December 2024, Geneva

## Forstering sustainable trade in coffee value chain

Gerardo Patacconi, Head of Operations, International Coffee Organization (ICO)

The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.

INTERNATIONAL COFFEE ORGANIZATION

# GLOBAL COMMODITY FORUM

## 10 December2024

Gerardo Patacconi
Head of Operations

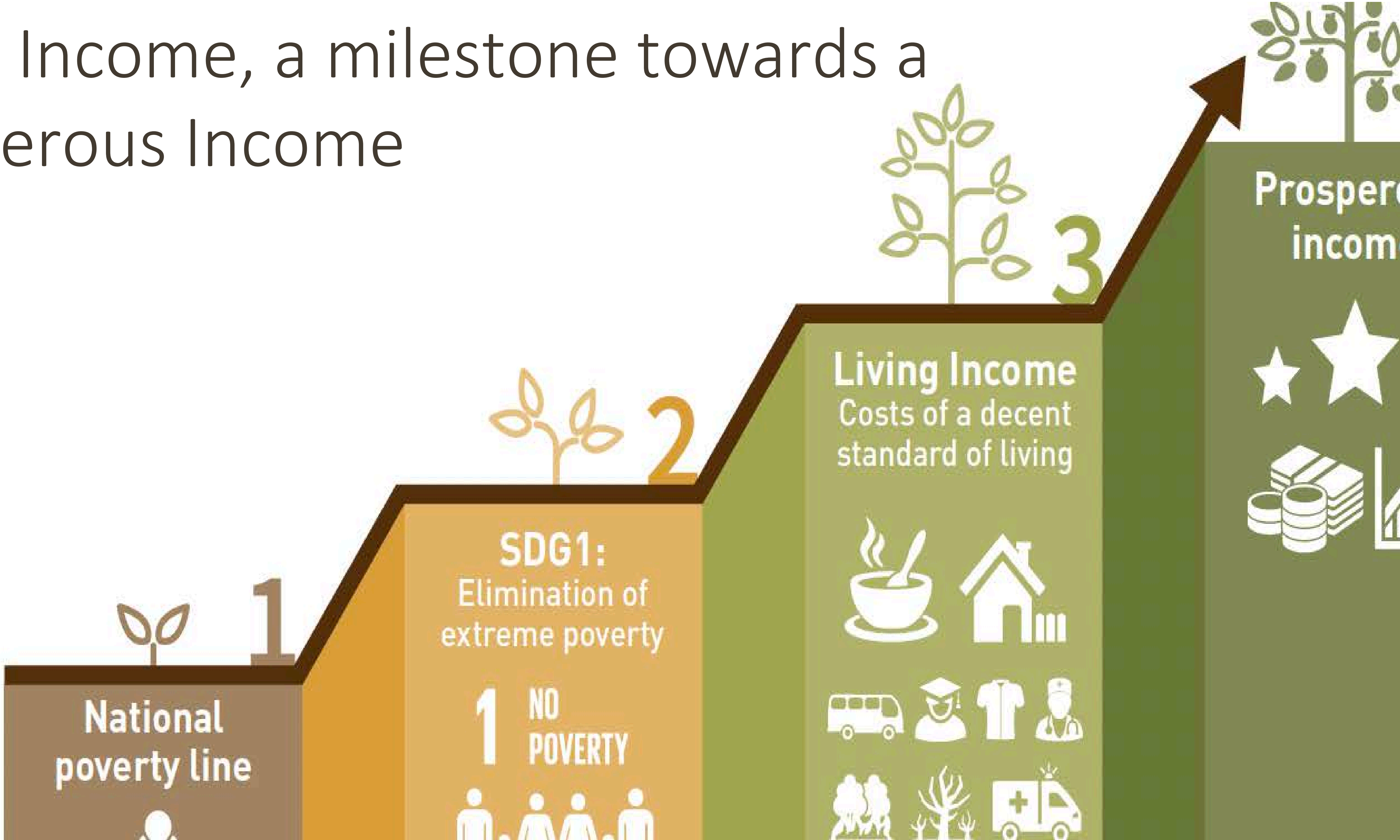
## GROWING DEMAND

- Globally, coffee is immensely popular, with **3 billion cups consumed daily.**
- Looking ahead, the demand for coffee is projected to continue growing over the next two decades (**growth 2.0-2.5%/yr**).
- Growing demand sets the stage for **significant changes and challenges in the coffee market**.

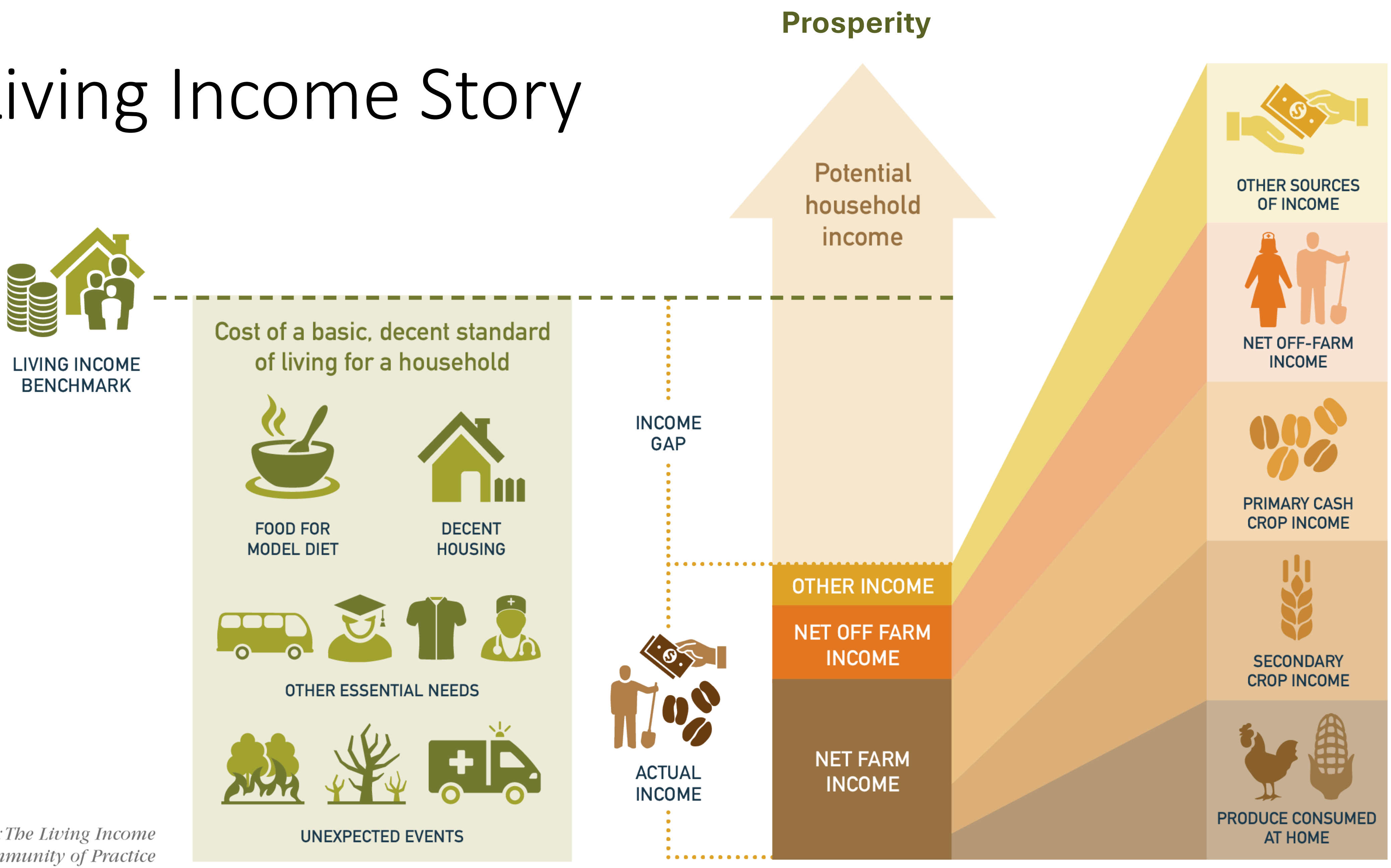
## CHALLENGES

- Fragmented Supply (smallholders)
- 25 million coffee family farmers worldwide/coffee primary source of income for 12.5Mil of these farmers.
- Over 80% of farmers are smallholders and at least 5.5 million e below  Poverty Line.
- Coffee is typically grown on hilly terrain, making mechanization often not feasible/too costly.
- Lack of long-term contracts/stable commercial relationships makes medium- & long-term planning & investment, challenging also due to poor access to credit, insurance, know-how etc.
- Impact of Climate Change: contraction of the supply side with risk of halving supply by 2050.

# Living Income, a milestone towards a Prosperous Income



# The Living Income Story




*Source: The Living Income Community of Practice*

# EUDR and Coffee:
# Experiences of traceability

# COFFEE VALUE CHAIN

Producer
Collector
Processor
Exporter
Importer
Roaster
Retailer
Consumer

# DIFFERENT TYPE OF FARMERS

## SMALL SCALE FARMERS

Majority of farms

Less than 5 hectares, often less than 3

A minority is active member of a producer organization (cooperatives, associations)

## MEDIUM SIZE FARMS

Often family operations with 5-15 hectares

Relies on family labor and day laborers

## LARGE, COMMERCIAL FARMS

10-150+ hectares

Often available full traceability

# CHALLENGES

**Challenges of EUDR for the coffee sector are not about deforestation but about DATA**

- **Technically** challenged to distinguish coffee/ agro-forestry from forest
- Coffee is grown by **millions of smallholders** in diverse countries
- Coffee is **mixed** very early in the supply chain
- 75% of coffee passes via **multiple actors**

# SYSTEMS FOR EUDR COMPLIANCE

**ICO'S CPPTF SURVEY**

**43 Service Providers in coffee**

- **67%** use **AI** for deforestation checks. **58%** combines ground truthing with other information
- **30%** use **high spectral resolution georeferenced** maps (30cm-5m), 64% medium (6-10m).
- **60% uses declaration in excess**
- **Only 50%** provide **data back to farmers**
- **40%** of schemes guarantee no mix with other coffee
- **11% uses data on geolocations/ deforestation of public systems**

# EXAMPLE: INDONESIA

- **1.8 million farmers (1.27 m ha)**
- 98% - smallholder farmers
- 20% certified production
- 774.960 metric tones of coffee

**TRENDS & CHALLENGES**

- Exports requirements (MRL, EUDR)
- Climate Change treats production
- Coffee productivity remains low
- Lack of sustainable farming practices

**FARMER'S CHARACTERISTICS**

- Older farmers
- 0,7 ha (average farm size per farmer)
- Limited access to smartphones
- Limited access to internet
- Coffee is cultivated in both dedicated areas (the farmer owns the land) and in the social forestry area (under Government rule/policy)
- Most farmers do intercropping systems (planting coffee with other crops)

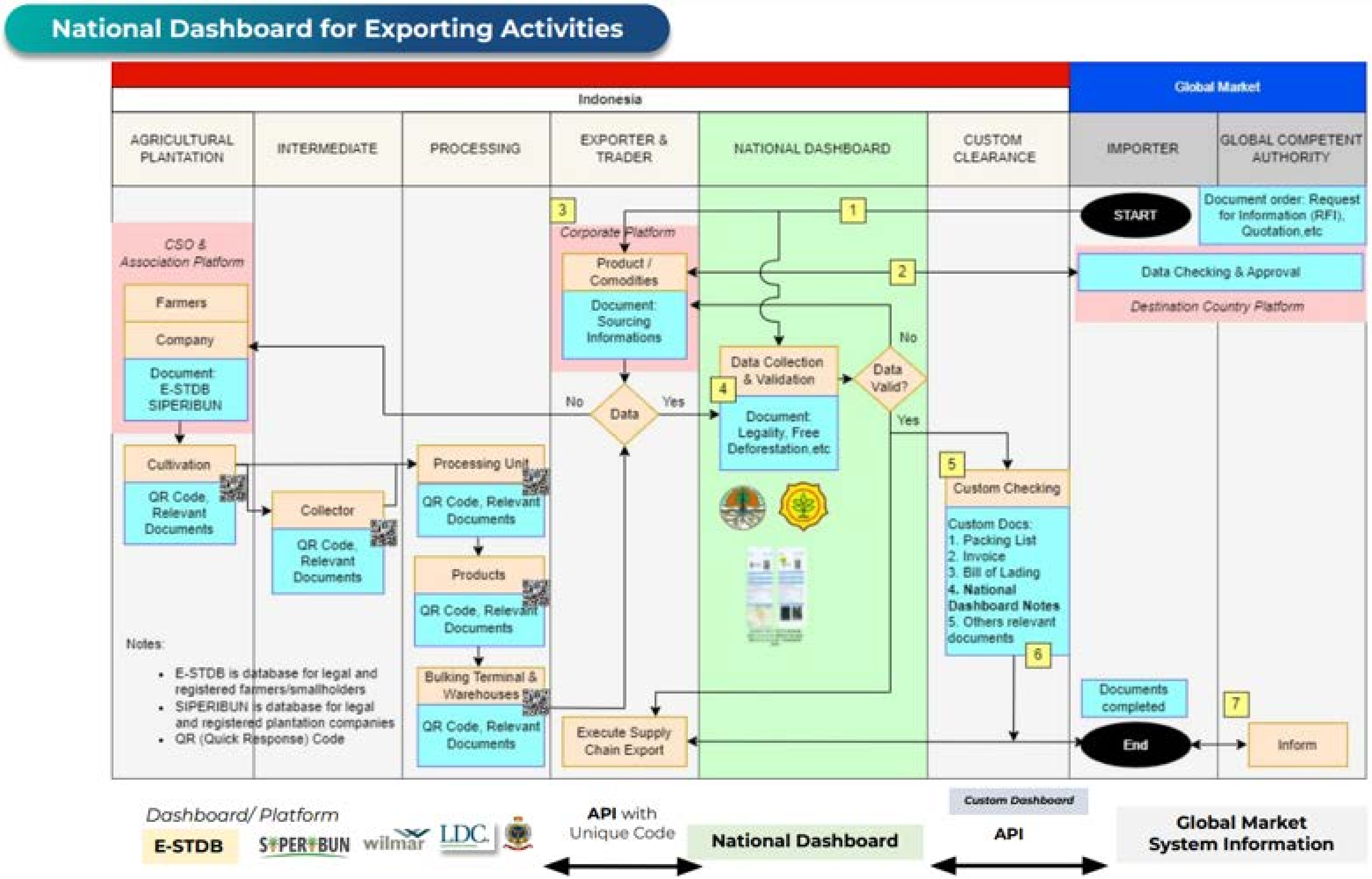
**SUPPLY CHAIN AND COFFEE TRADING**

- 70-75% is Robusta, 20% Arabica, 5% others
- 437.560 metric tones (56%) total production is for export (in 2022) and the rest is for domestic consumption
- Export destination countries in 2022: USA (13%), India (10%), Egypt (9%), Germany (8.5%), Malaysia (6.5%), other countries (53%).
- Farmer's supply chain: conventional: farmer -> farmer group -> local collector -> trader -> processor

INTERNATIONAL COFFEE ORGANIZATION

**Source:** SCOPI SUSTAINABLE COFFEE PLATFORM of INDONESIA

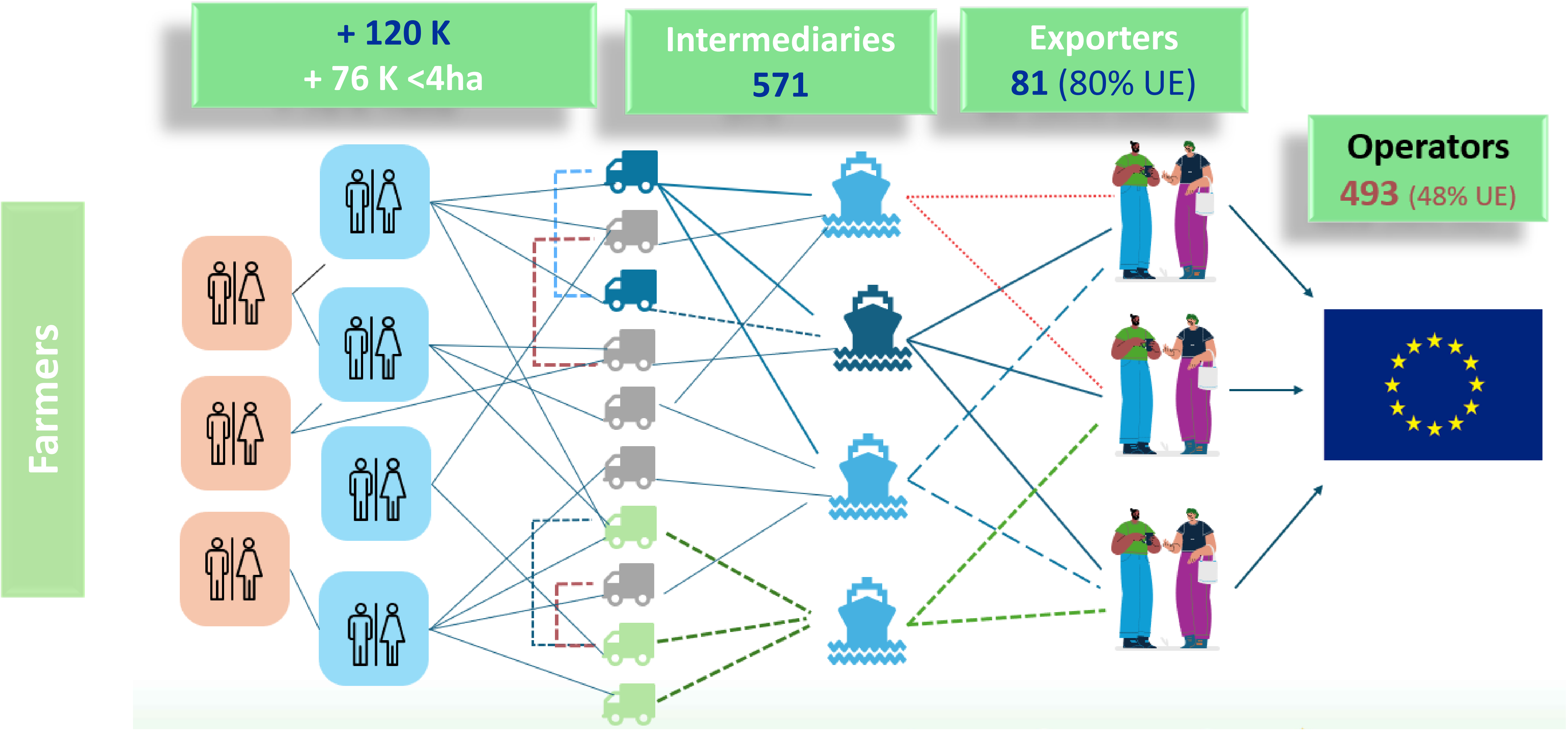
# INDONESIA: A NATIONAL DASHBOARD




Source: SCOPI Sustainable Coffee Platform of Indonesia

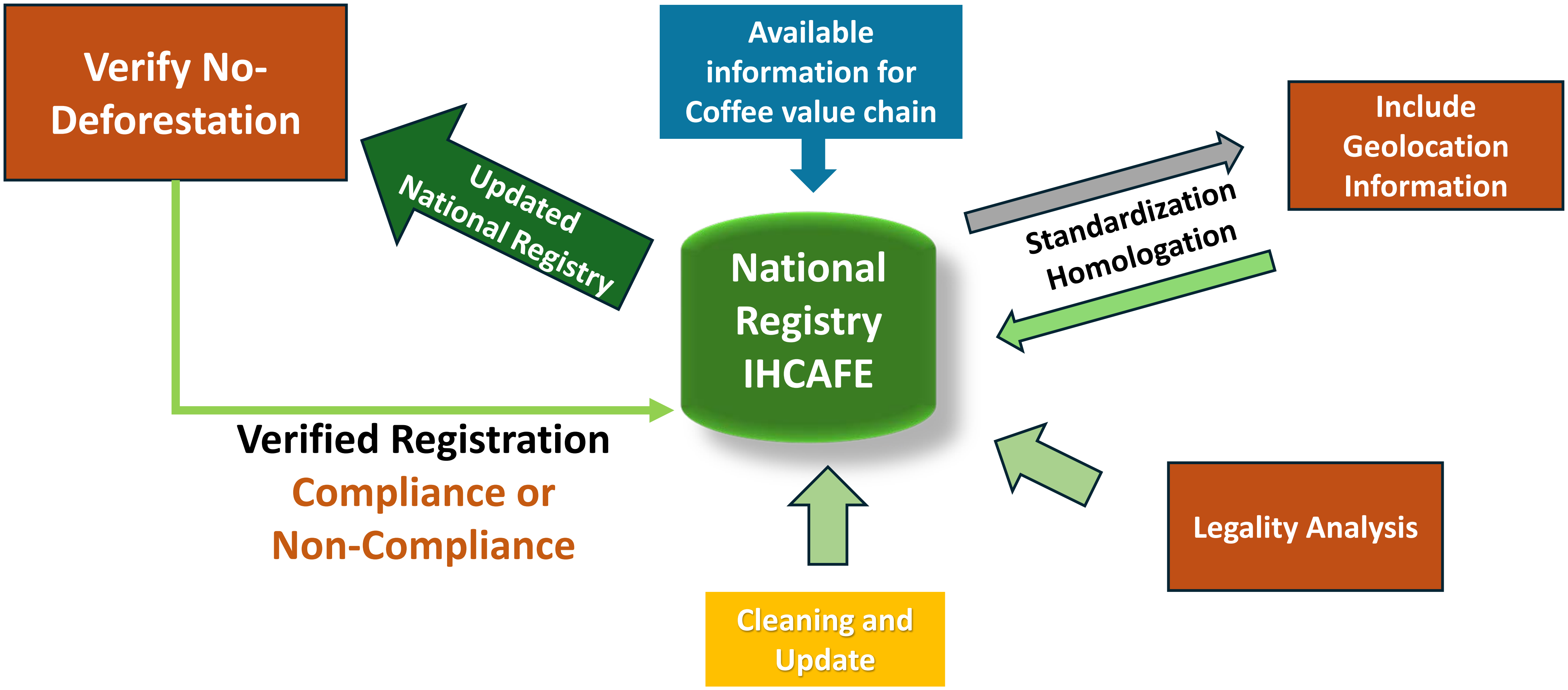
INTERNATIONAL COFFEE ORGANIZATION

# EXAMPLE: HONDURAS




INTERNATIONAL COFFEE ORGANIZATION

Source: IHCAFE




Source: IHCAFE

# App to collect information from small farms (< 4ha)


INTERNATIONAL COFFEE ORGANIZATION

Source: IHCAFE

# EXAMPLE: BRAZIL

## The Brazilian Coffees Traceability Platform

- **52 members** (cooperatives, national and international companies)
- **98%** of **shipments** of coffee from Brazil to the European Union covered

**MULTI-SECTORAL PROTOCOL FOR EUDR COMPLIANCE**

**(i) Extraction of polygons (CAR)**

**(ii) Deforestation Free (12/31/2020)**

PRODES

MAPBIOM

**(iii) Compliance with Relevant National Legislation**

CÓDIGO FLORESTAL

IBAMA

ICMBio INSTITUTO CHICO MENDES

**OVERLAYS:**

UCs; Indigenous and Quilombola Lands

**"Red List"**
of modern Slavery

INTERNATIONAL COFFEE ORGANIZATION

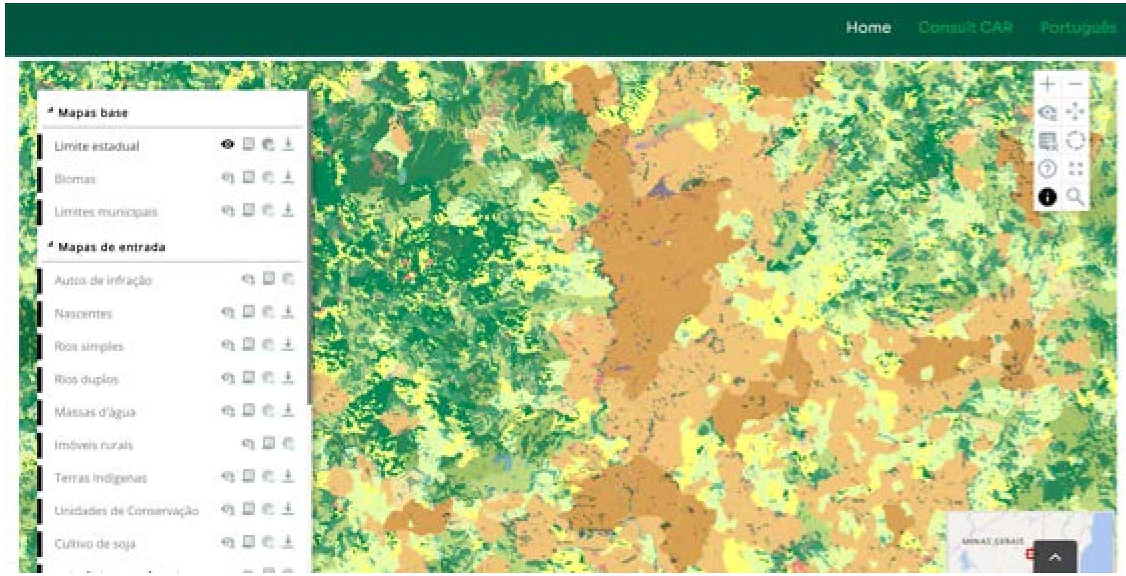
**Source:** Cecafé

# EXAMPLE: BRAZIL

## Selo Verde

SeloVerde MG


- Assess the compliance of rural properties with the Forest Code
- Provide transparent traceability of agricultural producers
- Integrate updated information and data from state and federal agencies
- Assist in socio-environmental compliance
- Identify unauthorized deforestation at the property-level



# MITIGATION APPROACH
# PATHWAY TO DEFORESTATION-FREE COFFEE

1 Leverage Artificial Intelligence to map forest, coffee polygons and monitor coffee deforestation risk

NO COST FOR PRODUCING COUNTRIES / FARMERS

2 Handle deforested coffee plot post 2020

YEARLY DEFORESTED COFFEE PLOT' LOCATIONS **PROVIDED FOR FREE**
DEFORESTED PLOTS REMOVAL UNDER COUNTRY RESPONSIBILITY
**JDE PEET'S SUPPORT** REFORESTATION

3 Strengthen on-going forest monitoring and protection per risk area

YEARLY AT RISK AREA LOCATIONS **PROVIDED FOR FREE**

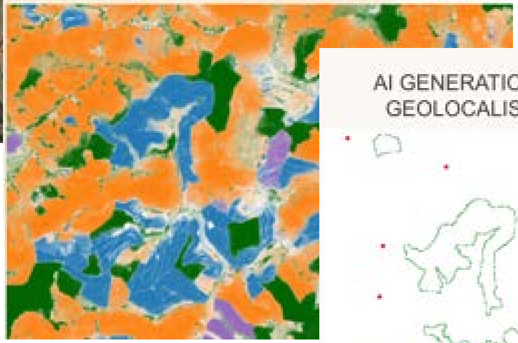
4 Support farmers in area with deforestation risk

5 Issue of EUDR due dilligence certificate

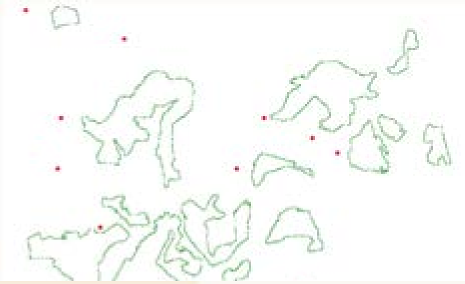
**EUDR DD CERTIFICATE COST PAID BY IMPORTERS TO FINANCE DATA GENERATION EVERY YEAR**

HIGH RESOLUTION SATELLITE IMAGERY (50X50CM)

AI GENERATION OF FOREST & COFFEE MAP WITH GROUND TRUTHING



AI GENERATION OF COFFEE PLOTS GEOLOCALISATION & POLYGONS



If deforestation risk is not negligeable, mitigation measures must be implemented on a yearly basis based on annual assessment of updated coffee map.


Coffee plot adjacent to forest: Communication & Awareness campaigns via e.g. local authorities, NGOs, etc. on deforestation impact on coffee exports to EU

Coffee plots adjacent to deforested land: grievance mechanism in place, and on-site visits and training to at-risk farmers on the risk of planting coffee

Deforested land "potentially" replanted with coffee to be verified & mitigated (see 2.)

JDE

# EXAMPLE: DECLARATION IN EXCESS – JDE PEET'S

INTERNATIONAL COFFEE ORGANIZATION